

Notice of Allowability

Application No.

10/764,479

Examiner

Thoi V. Duong

Applicant(s)

KAMIJO, KIMITAKA

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed April 24, 2007.
2. ☒ The allowed claim(s) ~~is~~ are 1,9-11,14,16 and 17.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892) None
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 24, 2007 has been entered.

Accordingly, claims 1, 14 and 17 were amended, and claims 2-8, 12, 13 and 15 were cancelled. Currently, claims 1, 9-11, 14, 16 and 17 are pending in this application.

Allowable Subject Matter

2. Claims 1, 9-11, 14, 16 and 17 are allowed.

The following is an examiner's statement of reasons for allowance: none of the prior art of record fairly suggests or shows all of the limitations as claimed. Specifically,

Re claims 1 and 14, none of the prior art of record discloses, in combination with other limitations as claimed, a liquid crystal display device comprising a reflective layer on an inner surface or an outer surface of the lower substrate, the reflective layer including an irregular surface including at least two types of different irregularity groups having different shapes or sizes, each irregularity group having substantially randomly arranged irregularities in plan view, the irregularity groups being substantially randomly arranged in plan view, the different irregularity groups each having a length that is

Art Unit: 2871

shorter than the length or width of the pixels and a width that is shorter than the length or width of the pixels, and the at least two types of different irregularity groups being disposed within a single pixel in plan view.

The most relevant reference, US 6,452,653 B1 to Yamanaka et al. (Yamanaka), fails to disclose or suggest the irregularity groups being substantially randomly arranged in plan view. As shown in Figs. 24A and 24B, Yamanaka discloses a reflective layer 15, which functions as a pixel electrode (col. 29, lines 20-22), including an irregular surface including at least two types of different irregularity groups having different sizes, each irregularity group having substantially randomly arranged irregularities 12 in plan view, the different irregularity groups each having a length that is shorter than the length or width of the pixels and a width that is shorter than the length or width of the pixels, and the at least two types of different irregularity groups being disposed within a single pixel in plan view (col. 29, lines 20-22 and col. 34, lines 14-28). However, Yamanaka does not disclose that the irregularity groups are substantially randomly arranged in plan view.

Re claim 17, Fig. 24B of Yamanaka shows four different patterns of substantially randomly arranged irregularities 12 in the pixel electrode 15; however, Yamanaka is silent about the length and width of each pattern.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (571) 272-2292. The examiner can normally be reached on Monday-Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms, can be reached at (571) 272-1787.

Thoi V. Duong



06/07/2007